In the Claims:

1. (Currently amended) In an emulator that includes printed circuit boards interconnected by a multi-conductor, ~~straight through,~~ cable with inputs at one end of the cable and corresponding outputs at the other cable end, an in situ method for determining the length of the cable, including the step of:

prior to installing the cable, interchanging the inputs or outputs of at least one pair of conductors to denote a cable length;

programming the emulator to input a test pattern to the cable;

programming the emulator to collect an output data pattern from the cable that results from the test pattern;

determining the cable length from the output pattern;

compiling the emulation program to account for each interchanged pair of conductors.

2 (Original) An in situ method for determining the length of the cable as in claim 1 wherein said test pattern is a pattern of alternating binary "1s" and "0s."

3 (Original) An in situ method for determining the length of the cable as in claim 1 wherein one cable length is denoted by having no interchanged pair of conductors.

4 (Original) An in situ method for determining the length of the cable as in claim 2 wherein one cable length is denoted by having no interchanged pair of conductors.